

Mr. Wayne Desai
Hayes-Lemmerz International, Inc.
1870 Riverfork Drive
Huntington, IN 46750

Dear Mr. Desai:

Re: Exempt Construction and Operation Status,
069-12740-00031

The application from Hayes-Lemmerz International, Inc., received on September 20, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following heat treat furnace, to be located at 1870 Riverfork Drive, Huntington, Indiana, is classified as exempt from air pollution permit requirements:

- (a) One (1) natural gas-fired in-line heat treat furnace, with a maximum heat input capacity of 6.0 mmBtu/hr and exhausts to one (1) stack designated as S-59.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

This existing source has submitted their Part 70 application (T-069-7421-00031) application on December 10, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

NLJ

cc: File - Huntington County
Huntington County Health Department
Air Compliance - Ryan Hillman
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak
Part 70 Application File - T-069-7421-00031

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: Hayes-Lemmerz International, Inc.
Source Location: 1870 Riverfork Drive, Huntington, IN 46750
County: Huntington
SIC Code: 3363
Exemption Permit No.: 069-12740-00031
Permit Reviewer: Nysa L. James

The Office of Air Management (OAM) has reviewed an application from Dana Corporation relating to the construction and operation of one (1) in-line heat treat furnace.

- (a) One (1) natural gas-fired in-line heat treat furnace, with a maximum heat input capacity of 6.0 mmBtu/hr and exhausts to one (1) stack designated as S-59.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (1) Letter transferring permits from Aluminum Conversion, Inc. to Western Wheel, Huntington, issued on September 13, 1988.
- (2) OP No. 35-01-93-0174, issued on October 17, 1989.
- (3) RP No. 069-2096-00031, issued on April 21, 1992.
- (4) Name change from Western Wheel Huntington, Inc. to Hayes Wheels International, Inc., issued on February 23, 1993.
- (5) Exemption CP No. 069-2921-00031, issued on March 26, 1993.
- (6) CP No. 069-3011-00031, issued on November 19, 1993.
- (7) RP No. 069-3712-00031, issued on July 15, 1994.
- (8) CP No. 069-4665-00031, issued on October 26, 1995.
- (9) A069-5245-00031, an amendment to CP No. 069-4665-00031, issued on February 9, 1996.
- (10) Amendment to CP No. 069-4665-00031, issued on April 10, 1996.

Source History

This source's prior name was Hayes Wheels International - Huntington. On September 20, 2000, the an application was submitted which listed the source's name as Hayes-Lemmerz Internal, Inc.. Based on this application, the source's name has been changed from Hayes Wheels International - Huntington to Hayes-Lemmerz Internal, Inc.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S-59	heat treat furnace	27	1.67	250	450

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 20, 2000 with additional information received on October 12, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (page 1 of 1).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	0.05
PM-10	0.20
SO ₂	0.02
VOC	0.14
CO	2.21
NO _x	2.63

HAP's	Potential To Emit (tons/year)
Benzene	5.52E-05
Dichlorobenzene	3.15E-05
Formaldehyde	1.97E-03
Hexane	4.73E-02
Toluene	8.94E-05
Lead	1.31E-05
Cadmium	2.89E-05
Chromium	3.68E-05
Manganese	9.99E-06
Nickel	5.52E-05

TOTAL	4.96E-02
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Actual Emissions

The following table shows the actual emissions from the source. This information reflects the Hayes-Lemmerz's 1996 criteria pollutant emission data and Hayes-Lemmerz's 1995 HAP emission data.

Pollutant	Actual Emissions (tons/year)
PM	4.34
PM-10	4.34
SO ₂	0.526
VOC	12.2
CO	4.56
Glycol Ethers	0.99
Xylene	0.04
Chromium	0.0102
Nickel	0.08
NOx	22.1

County Attainment Status

The source is located in Huntington County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Huntington County has been classified as attainment or unclassifiable for PM₁₀, CO and SO₂. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-069-7421-00031) application on December 10, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this heat treat furnace.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this heat treat furnace.

State Rule Applicability - Heat Treat Furnace

326 IAC 2-4.1-1 (Major Sources of Hazardous Air Pollutants) is not applicable because the potential to emit of a single HAP is less than 10 tons per year and the potential to emit of the combination of HAPs is less than 25 tons per year.

326 IAC 4-2 (Incinerator) is not applicable because this unit does not heat treat painted wheels, therefore the unit does not meet the definition of an incinerator.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) is not applicable to this unit because this unit is not a source of indirect heating.

326 IAC 6-3 (Process Operations) is not applicable since this unit is a combustion facility.

326 IAC 8-1-6 (New facilities; General Reduction Requirements) is not applicable to this unit because the potential to emit of VOC is less than 25 tons per year.

No other 326 IAC 8 rules apply.

Conclusion

The construction and operation of this heat treat furnace shall be subject to the conditions of the attached **Exemption 069-12740-00031**.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Heat Treat Furnace****Company Name: Hayes-Lemmerz International, Inc.****Address City IN Zip: 1870 Riverfork Drive, Huntington, IN 46750****CP: 069-12740****Pit ID: 069-00031****Reviewer: NLJ****Date: 10/12/000**Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

6.0

52.6

Pollutant

Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	SO2 0.6	NOx 100.0 **see below	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.05	0.20	0.02	2.63	0.14	2.21

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low Nx Burners/Flue Gas Recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	5.519E-05	3.154E-05	1.971E-03	4.730E-02	8.935E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.314E-05	2.891E-05	3.679E-05	9.986E-06	5.519E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.